Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A multi-stack optical data storage medium ~~(20)~~ for rewritable recording using a focused radiation beam ~~(19)~~ entering through an entrance face ~~(16)~~ of the medium ~~(20)~~ during recording, comprising:

[[-]] a substrate ~~(1)~~ with deposited on a side thereof:

[[-]] a first recording stack ~~(2) L_0~~ comprising a first phase-change type recording layer ~~(6)~~, said first recording stack ~~(2)~~ being present at a position most remote from the entrance face ~~(16)~~,

[[-]] at least one further recording stack ~~(3) L_n~~, which comprises a further phase-change type recording layer ~~(12)~~, being present closer to the entrance face ~~(16)~~ than the first recording stack ~~(2)~~, the further recording layer having a first surface closest to the entrance face and a second surface furthest from the entrance face,

[[-]] a transparent spacer layer ~~(9)~~ between the recording stacks ~~(2, 3)~~, said transparent spacer ~~(9)~~ layer having a thickness larger than the depth of focus of the focused laser-light beam ~~(19)~~,

~~characterized in that~~wherein the further recording layer ~~(12)~~ is substantially of an alloy defined by the formula $Ge_xSb_yTe_z$ in atomic percentages, where $0<x<15$, $50<y<80$, $10<z<30$ and $x+y+z=100$ with a thickness selected from the range of 4 to 12 nm and ~~that at least one~~ a first transparent crystallization promoting layer ~~(11', 13')~~ having a thickness smaller than 5 nm is present in contact with the first surface of the further recording layer ~~(12)~~ and a second transparent crystallization promoting layer having a thickness smaller than 5 nm is present in contact with the second surface of the further recording layer.

2. (Currently amended) ~~An~~ The optical storage medium ~~(20)~~ as claimed in claim 1, wherein the first and second transparent crystallization promoting ~~layer (11', 13') mainly~~layers comprises a material selected from the group of nitrides, oxides of Si, Al and Hf.

3. (Currently amended) ~~An~~ The optical storage medium ~~(20)~~ as claimed in claim 2, wherein the first and second transparent crystallization promoting ~~layer (11', 13') mainly comprises a material selected from the group of nitrides of Al and nitrides of Si~~ layers comprise Si_3N_4.

4. (Currently amended) ~~An~~ The optical storage medium ~~(20)~~ as claimed in claim 2, wherein the further recording layer ~~(12)~~ has a thickness selected from the range of 4 to 8 nm.

5. (Currently amended) ~~An~~ The optical storage medium ~~(20)~~ as claimed claim 1, wherein the alloy has a composition defined by the formula $Ge_xSb_yTe_z$ in atomic percentages, where $5<x<8$, $70<y<80$, $15<z<20$ and $x+y+z=100$.

6. (Currently amended) ~~An~~ The optical storage medium ~~(20)~~ as claimed in ~~any one of claims 1~~claim 1, wherein a metal reflective layer ~~(14)~~, semi-transparent for the radiation beam ~~(19)~~, is present in the further recording stack ~~(3)~~.

7. (Currently amended) ~~An~~ The optical storage medium ~~(20)~~ as claimed in claims 6, wherein the metal reflective layer ~~(14)~~ mainly comprises the element Cu.

8. (Currently amended) Use of an optical storage medium ~~(20)~~ as claimed in claim 1, for high speed recording with a recording speed higher than 12 m/s.

9. (New) The optical storage medium as claimed in claim 1, wherein the first recording stack and the further recording stack have the same composition.

10. (New) The optical storage medium as claimed in claim 1, wherein the first recording stack and the further recording stack have the composition $Ge_7Sb_{76.4}Te_{16.6}$.

11. (New) The optical storage medium as claimed in claim 1, the first recording layer having a first surface closest to the entrance face and a second surface furthest from the entrance face, the optical storage medium comprising:

a third transparent crystallization promoting layer in contact with the first surface of the first recording layer, and

a fourth transparent crystallization promoting layer in contact with the second surface of the first recording layer.

12. (New) A multi-stack optical data storage medium for rewritable recording using a focused radiation beam entering through an entrance face of the medium during recording, comprising:

a substrate with deposited on a side thereof:

a first recording stack comprising a first phase-change type recording layer, said first recording stack being present at a position most remote from the entrance face,

at least one further recording stack, which comprises a further phase-change type recording layer, being present closer to the entrance face than the first recording stack,

a transparent spacer layer between the recording stacks, said transparent spacer layer having a thickness larger than the depth of focus of the focused laser-light beam,

wherein the further recording layer is substantially of an alloy defined by the formula $Ge_xSb_yTe_z$ in atomic percentages, where $0<x<15$, $50<y<80$, $10<z<30$ and $x+y+z=100$ and at least one transparent

crystallization promoting layer is present in contact with the further recording layer, wherein the first recording layer has a composition $Ge_7Sb_{76.4}Te_{16.6}$.

13. (New) The optical storage medium as claimed in claim 12, wherein the first recording stack and the further recording stack have the same atomic percentages of compounds.

14. (New) The optical storage medium as claimed in claim 12, wherein the first recording stack and the further recording stack have the same composition.

15. (New) The optical storage medium as claimed in claim 12, wherein the at least one transparent crystallization promoting layer comprises a first and second transparent crystallization promoting layer, wherein the further recording layer comprises a first surface closest to the entrance face and a second surface furthest from the entrance face, wherein the first transparent crystallization promoting layer is present in contact with the first surface of the further recording layer and the second

transparent crystallization promoting layer is present in contact with the second surface of the further recording layer.

16. (New) The optical storage medium as claimed in claim 15, the first recording layer comprising a first surface closest to the entrance face and a second surface furthest from the entrance face, the optical storage medium comprising:

a third transparent crystallization promoting layer in contact with the first surface of the first recording layer, and

a fourth transparent crystallization promoting layer in contact with the second surface of the first recording layer.